TOWARDS THE DEVELOPMENT OF AN "ESE" SCALE FOR CHINESE VILLAGERS

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Abstract

This conceptual research examines entrepreneurial self-efficacy (ESE) when applied in a family-centered village context in China. ESE is one’s belief in his/her capabilities to successfully achieve entrepreneurial tasks. The ESE construct has been examined by various researchers. Prior studies, however, have predominantly examined or developed scales underpinning the ESE construct in western contexts using western students, western managers, and/or western entrepreneurs. These scales do not reflect the economic environment, education and cultural differences that exist in the Chinese village context. We argue that although the theoretical underpinnings of ESE have global relevance, the application of western-developed ESE scales may be inappropriate in a Chinese village context. In this research, we make the case for the development of a Chinese village ESE scale. With China’s increasing global influence, entrepreneurial theories need to be more encompassing and reflect both western and eastern similarities and differences.

Introduction

Almost all of the economically active population in rural China before the economic reforms in the late 1970s was exclusively engaged in farming (Kirby, 1995) and land was centrally controlled at a village or provincial government level (De Brauw et al. 2002). For historical reasons, including changes related to land reform, there has been a trend toward increased business ownership and entrepreneurship in rural China over the last 30 years. Yet, little research has examined communist entrepreneurs in general and communist Chinese
entrepreneurs in particular (Ageev, 2005).

From another perspective, as we enter the 21st century, it is obvious that the center of the world’s manufacturing economic activities has shifted eastward from the USA and Europe to China and its Asian neighbors (Dicken 2003; Sklair 1999). This situation presents new opportunities for entrepreneurial development. For China, faced with its current increasingly grim employment situation (Li, 2008), the development and implementation of entrepreneurship is an important topic that requires closer examination.

In this research, we examine one aspect of western entrepreneurship theory – entrepreneurial self-efficacy (ESE) – and compare the western based origin of the factors that contribute toward the development of ESE in individual entrepreneurs with the conditions that exist within the Chinese village context. We adopt a broad interpretation of an entrepreneur as someone who starts and/or grows a business (Gartner, 1990). ESE is said to be one’s belief in his/her own capabilities to successfully achieve the tasks of entrepreneurship (see Boyd & Vozikis 1994; Chen et al. 1998; De Noble et al. 1999; Wilson, Kickul & Marino 2007). In particular, we explore the nature of the ESE construct for use in a Chinese family-centered village context where the family is inextricably linked to the entrepreneurial process.

Yang (2002) argued that western developed entrepreneurship theory may not necessarily apply in China because of cultural, historical, and political differences between the West and China. To illustrate this, Nisbert (2003) outlines significant differences between Asian and western cultures in terms of collectivist and individual ideals. Any village centric Chinese ESE scale will need to take into consideration the collectivist influence on self-efficacy and the way in which Chinese entrepreneurs are guided by family members and the extended family collective. The subjective norms - the views of family members - can influence an individual’s beliefs and consequently entrepreneurial behavior. Therefore in a Chinese village context, the nexus between the entrepreneur, the business, and the extended family will be a significant influence on an individual in pursuing entrepreneurship and this influence needs to be accounted for in an ESE instrument.

Also motivating this research is an acknowledgement that entrepreneurs do not constitute a homogeneous entity with homogeneous behavior and that research into different entrepreneur types is needed (Ucbasaran, Westhead, and Wright 2001). Current entrepreneur theory is largely western oriented. However, Dana (2000) explained that when investigating non-western environments, in for example Indigenous entrepreneurship, western theories may need to be modified to accommodate the different attitudes and behaviors of Indigenous entrepreneurs. In China there is a huge gulf between a city like Shanghai, in which entrepreneurial success may be argued is linked via ties with western economies, and rural villages such as those in the west of China. In these more geographically isolated villages villagers are more like traditional Indigenous inhabitants with different family values, educational backgrounds and possibly motivations compared to their Chinese city counterparts. Western ESE instruments assume that formal education is...
a primary contributor to ESE and the survey questions are constructed from this viewpoint. The Indigenous nature of the Chinese villager needs to be a primary consideration in developing a Chinese village ESE instrument since family play a major role in learning and are a significant influence on ESE where formal education and training is often absent.

**Entrepreneurial Self-Efficacy**

Self-efficacy is of great benefit to entrepreneurs (Chen et al., 1998). The general concept of self-efficacy is defined as an individual’s ability to achieve his/her specific goal in a specific situation. The individual as “agent” is the determining factor in this behavior (Bandura, 1978). In an entrepreneurial context, the specific goal is taken to be the starting of a business and in this research the specific context is the Chinese village. Self-efficacy helps to explain an individual’s choice, level of effort, and perseverance in achieving an entrepreneurial task (Chen et al., 2004). Individuals with higher self-efficacy for certain tasks are more likely to pursue and then persist in those tasks compared with individuals who possess low self-efficacy (Bandura, 1997).

ESE is a key antecedent to entrepreneurial intention (Chen et al., 1998). Intention is also a function of both attitudes and subjective norms toward a behavior (Kim and Hunter, 1993). In turn, intentions are a good predictor of behavior. Behavioral intention as it relates to entrepreneurship can be defined in terms of having an attitude to establish and/or operate a business (Kim and Hunter, 1993). Therefore, understanding ESE in specific contexts is useful to underpin our understanding of how intentions are formed which consequently affect entrepreneurial behavior. In Chinese village society family subjective norms play a particularly important role in developing an individual’s ESE and in influencing and individual’s entrepreneurial intentions. Thus, subjective norms and intention are important variables to examine in the development of an ESE scale for a Chinese village context where the extended family collectively plays an important role in ESE development and where family subjective norms are strongly influential of entrepreneur intentions and behavior. Since Chen et al.’s (1998) ESE scale successfully distinguished entrepreneurs and managers, researchers have been attracted to test this scale and to refine it for different contexts. Chen et al.’s (1998) scale includes items on marketing, innovation, management, risk-taking, and financial control that respondents rate on a 5-point Likert scale. However, in a Chinese village context, where economic environments are less affluent, formal education and training is absent, where a different culture is present, and where family subjective norms carry significant weight, this scale may be ineffective in distinguishing entrepreneurs from non-entrepreneurs.

De Noble et al.’s (1999) ESE scale, which is based upon Chen et al.’s (1998) scale, emphasizes the ability to develop social networks as an essential characteristic of entrepreneurial self efficacy. Since social networks, in particular family networks, play an important role in Chinese village society, De Noble et al.’s (1999)
scale may have potential for providing the foundations for development of a Chinese village ESE scale.

**Does the economic environment matter for an ESE instrument?**

Although the literature on ESE and the measurement of ESE is well developed, there remain obstacles which we believe impede further development and effective application of the construct in Chinese village contexts. In this regard, consideration needs to be given to the motivations for establishing businesses in Chinese villages versus more affluent and diverse environments such as some Chinese cities and many western contexts. Although not universal, many Chinese village entrepreneurs are faced with having to establish businesses to survive because of a lack of employment prospects and unemployment benefits.

Work by the Global Entrepreneurship Monitor (GEM 2008) distinguishes those who enter entrepreneurship because of necessity to earn some form of income from those who choose entrepreneurship because they identify a specific opportunity as necessity and opportunity entrepreneurs respectively. The entrepreneurial motivations of necessity entrepreneurs can significantly differ from opportunity entrepreneurs and therefore the entrepreneurial intention motivating effects can also differ. We argue that the strength of the relationship between entrepreneurial intention and ESE may differ between these two types of entrepreneurs. This difference can affect the utility of the ESE instrument as it may be found that low ESE scores do not reliably correlate with a lack of intention.

In sum, the factors that contribute toward a belief in one’s entrepreneurial ability in a Chinese village context will differ from those in western and Chinese city contexts. The motivating factors contributing toward entrepreneurial intention will also be different and will differ in degree as to how imperative entrepreneurial intention transitions to actual business start-up. Therefore the economic environment within which ESE is being measured matters because it contributes to motivation and intention.

**Will differences in education background influence the ESE scale construction?**

The western ESE scales have been developed upon the responses of MBA and other university students, and practicing managers and entrepreneurs (Jeffrey et al., 2009) in western business environments. This, we consider, may be problematic when they are used in Chinese village contexts. In this regard, Table 1, adapted from Jeffrey et al. (2009), provides insights into how a range of ESE scales were developed. Since in the Chinese village context, formal education and training is often absent and entrepreneurs tend to be necessity entrepreneurs, these scales which are developed from well educated individuals may not be relevant to Chinese village entrepreneurs.
A major issue in measuring ESE in a Chinese village context is the acquisition of knowledge that contributes toward the development of ESE. Experience and education are important drivers of ESE. Pre-ownership experience is a significant predictor of ESE (Chandler and Jansen, 1997). Mastery experiences developed through repeated performance accomplishments are most effective in developing an ESE (Chandler and Jansen, 1997). Less effective means include observational learning – learning from others via attending educational classes and reading about the phenomena (see, for example, Gist and Mitchell, 1992; Chandler and Jansen, 1997).

Compared to western contexts, Chinese village entrepreneurs receive less formal education. Few Chinese village entrepreneurs have formal business or entrepreneurial education and training when compared to those entrepreneurs in western environments. Western developed ESE scales appear to be overly reliant on data collected from educated university students and practicing entrepreneurs which are easier to access. Generally the survey design relies upon questions relating to an individual’s self-belief in abilities to perform particular business functions. In economically depressed areas with generally low levels of formal education, self-efficacy in these functional areas may not be reliable indicators of intention given that motivation and not knowing what one does not know may supersede or override the western concept of ESE. This suggests that the development of the ESE scale needs to be reconsidered and the data informing the instrument needs to be representative of a broader cross-section of different educational contexts.

**Will different cultural backgrounds influence the ESE instrument?**

The focus of western ESE research has been based on the perceived personal capability (Chen et al., 1998, Bandura, 1978) with respect to starting a business. Nisbert (2003) draws our attention to the differences between western and Chinese cultural subjective norms in terms of individualism in western societies and collectivism in Chinese community. The western based ESE theory is grounded in this individualism subjective norm. Therefore ESE in the Chinese context needs to be re-evaluated to consider the affects of collectivism.

We argue that the western ESE theory grounded on an individual’s belief in their own capability does not reflect the influence of the collectivist values of Chinese culture. The collectivist culture in China raises the importance of family endorsement and inclusion in the decision to start a business. A Chinese individual will assess themselves in comparison to the collective context and reflect on the contribution of and to the collective. This assessment will be an important
component in their self-belief to successfully start a business. They need confidence in their ability to persuade their family and communities to not only attract support and commitment but importantly, the personal contribution for collective action.

Most items in the ESE instrument address an individual’s capability in key functional business but ignore the elements of confidence necessary for an individual to start a business in a collectivist culture that is discouraging of individualistic actions. Western ESE scales are less reflective of collective extended family influences, village and family subjective norms, and the importance of the accumulation of resources in families acquired over generations. These factors significantly impact the development of entrepreneurial confidence levels and entrepreneurial abilities to start a business in the Chinese village context.

**Toward a Chinese Village ESE scale(s): A Future Research Direction**

Self-efficacy has been explored extensively in the western context and also in some Chinese industries (Chao, 1998). However, little research has been conducted about the ESE of necessity-based Chinese village entrepreneurs where significant differences in economic environment, education and culture require special consideration in assessing ESE. Any such scale needs to be aligned with such conditions. However, at this point, we can only speculate about the (in)validity of using western developed scales in Chinese contexts. We also acknowledge that there are Chinese regional differences suggesting that there may be room to use western developed scales in more affluent and westernized Chinese regions such as the South-East (or, at the very least, adopt a modified version of such scales that reflect Chinese idiosyncrasies).

In this regard, we recommend trialing De Noble et al.’s (1999) scale which was founded upon Chen et al.’s (1998) scale. We focus on De Noble et al.’s (1999) scale because it contains a social network dimension that may be relevant for Chinese village contexts. Based on preliminary evidence collected, we believe that this scale will be ineffectual in more rural, lower socio-economic villages where education levels are considerably lower than in villages where literacy is considerably higher. In these environments, a new ESE scale will require development that reflects Chinese village cultural context. Although subjective norms are a separate construct from ESE, measures of ESE in Chinese village contexts need to be informed by family subjective norms. While existing theory that underpins existing western developed ESE scales needs to be acknowledged, an ESE scale for use in a village context will require extension of such theory to reflect Chinese village economic environment, educational and cultural norms.

While one could question the benefit of developing such a scale, one cannot ignore that China is expanding its presence globally and that the considerable population of China that exist in rural village environments is significant. As such, any theory underpinning ESE will be incomplete if it does not reflect worldly phenomena in its entirety. Without pursuing this research direction, future research into Chinese village entrepreneurs allowing us to better understand how to improve
their entrepreneurial behavior and the quality of the opportunities that their businesses are founded upon will be difficult.

**Proposing a sampling method**

Thus far, Chinese village contexts have been described as uniform; however, regions in China differ dramatically. Affected by history, culture, and politics, different areas in China such as the Southern and the Western regions have significant differences related to private enterprise development (Guo, 2006). There also are regional differences in economic situations and income levels of entrepreneurs and non-entrepreneurs. For example, in South-Eastern China, there are more people involved in entrepreneurial activities than the North-Western provinces. There also is a large income gap between the two regions even when the proportion of entrepreneurs is almost the same. Incomes are generally higher in coastline villages in the South-East than rural villages in the Northwest province.

Why there are economic and entrepreneurial differences between the regions is not clear. One explanation involves the role of provincial government intervention. In 2008, the Zhejiang Province Government in the South East implemented a range of policies including the "entrepreneurship makes rich people, and innovation makes a strong province". This is a new stage for provincial governments in China where entrepreneurship is given prominence in policy. Another reason for the prominence of the Southeast could be its better business environment. Yang (2004) suggests that the Northwestern region suffers from obsolete ideas; a poor policy environment, a shortage of funds, and lack of talented persons as opposed to better conditions in the Southeast (Yang 2004). Thus, the South-Eastern coastal cities and villages tend to be more economically buoyant, have greater educational standards and greater literacy, and demonstrate a greater entrepreneurial similarity with western society compared with the northwest province which is more government oriented and comparatively poor economically.

Having two different types of economic regions in China makes it possible to test the robustness and generalizability of an ESE scale developed specifically for Chinese village contexts across these regions. It also allows for an examination of the applicability of an existing western developed ESE scale such as De Noble et al.’s (1999) in Chinese village contexts across regions. In this regard, it is expected that De Noble’s scale may demonstrate partial validity in the South East but no validity in the North West.

**Summary**

ESE research in the context of Chinese villages is complex and requires a systematic approach that involves the creative application of theoretical knowledge. This paper adopts a sociological and psychological perspective on entrepreneurship to explore the influence of Chinese village contexts on western developed ESE scales arguing that it may be more appropriate to develop a new ESE scale that is relevant to Chinese village society. The level of sophistication of entrepreneurial ventures in Chinese cities which can be tied to the success of entrepreneurial ventures in the

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west can be far different from the realities of Chinese village enterprises. Thus, not only can we expect entrepreneurial differences among western and Chinese entrepreneurial behavior at the individual and firm levels, differences can be expected to be manifested between city and village entrepreneurial behavior.

References


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<th>Study</th>
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<th>Items</th>
<th>Sample Description</th>
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<tr>
<td>Anna, Chandler, Jansen, and Mero (1999)</td>
<td>ESE</td>
<td>12 items</td>
<td>170 women business owners loading on 4 factors</td>
<td>The types of ESE exhibited by female business owners in traditional industries differed from female business owners in nontraditional industries.</td>
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<td>Arenius and minniti (2005)</td>
<td>ESE</td>
<td>1 item</td>
<td>51,721 participants in the Global Entrepreneurship Monitor project</td>
<td>ESE is positively associated with being a nascent entrepreneur.</td>
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<td>Barbosa et al. (2007)</td>
<td>ESE</td>
<td>18 items</td>
<td>528 university students from Russia, Norway, and Finland loading on 4 factors</td>
<td>Differing cognitive styles and levels of risk preference are associated with different types of ESE.</td>
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<td>Baughn, Cao, Le, Lim, and Neupert (2006)</td>
<td>ESE</td>
<td>16 items</td>
<td>782 upper-division university students from China, Vietnam, and the Philippines</td>
<td>Female students exhibited lower levels of ESE than their male counterparts in China, Vietnam, and the Philippines.</td>
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<td>Begley and Tan (2001)</td>
<td>ESE</td>
<td>7 items</td>
<td>1,253 MBA students loading on 1 factor* from 6 East Asian and Western countries</td>
<td>East Asian MBA students exhibited lower levels of ESE than MBA students in Western countries.</td>
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<td>Chen et al. (1998)</td>
<td>ESE</td>
<td>22 items</td>
<td>140 undergraduate and MBA students and 175 small business managers and founders</td>
<td>The type of ESE exhibited by entrepreneurs differs from those exhibited by managers.</td>
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<td>De Noble et al. (1999)</td>
<td>ESE</td>
<td>22 items</td>
<td>359 undergraduate and graduate university students</td>
<td>ESE is positively associated with entrepreneurial intentions. ESE can differentiate entrepreneurial students from nonentrepreneurial students.</td>
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<tr>
<td>Dmovsek and Glas (2002)</td>
<td>ESE</td>
<td>19 items</td>
<td>302 innovators and graduate students from Slovenia and the Czech Republic loading on 5 factors*</td>
<td>The type of ESE exhibited by innovators differed from those exhibited by graduate business students.</td>
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<td>Erikson (2002)</td>
<td>ESE</td>
<td>6 items</td>
<td>65 British MBA students</td>
<td>The multiplicative effect of perceived entrepreneurial competence and entrepreneurial commitment is strongly correlated with</td>
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<td>Florin et al. (2007)</td>
<td>ESE</td>
<td>8 items*</td>
<td>220 undergraduate university students</td>
<td>GSE is associated with entrepreneurial drive. Senior university students exhibit higher self-efficacy than their undergraduate counterparts.</td>
</tr>
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<td>Forbes (2005)</td>
<td>ESE</td>
<td>15 items loading on 5 factors*</td>
<td>95 Internet entrepreneurs</td>
<td>ESE is influenced by the way in which entrepreneurs make strategic decisions.</td>
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<td>Kolvereid and Isaksen (2006)</td>
<td>ESE</td>
<td>18 items loading on 4 factors</td>
<td>297 Norwegian business founders</td>
<td>ESE is not significantly associated with entrepreneurial behavior.</td>
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<td>Kristiansen and Indarti (2004)</td>
<td>ESE</td>
<td>2 items</td>
<td>251 university students from Indonesia and Norway</td>
<td>ESE is positively associated with entrepreneurial intentions among Norwegian and Indonesian students.</td>
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<td>Krueger et al. (2000)</td>
<td>ESE</td>
<td>Not given</td>
<td>97 undergraduate university students</td>
<td>Perceived self-efficacy is positively associated with perceived feasibility of entrepreneurial intentions.</td>
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<td>Tominc and Rebernik (2007)</td>
<td>ESE</td>
<td>1 item</td>
<td>603 participants in the Global Entrepreneurship Monitor project</td>
<td>GSE is lower among Hungarian early-stage entrepreneurs compared to their counterparts in Slovenia and Croatia.</td>
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<tr>
<td>Zhao et al. (2005)</td>
<td>ESE</td>
<td>4 items loading on 1 factor*</td>
<td>265 MBA students</td>
<td>ESE plays a mediating role between entrepreneurial intentions and formal learning, entrepreneurial experience, and risk propensity.</td>
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